

ABSTRACT OF THE DISCLOSURE

An EGR control device is provided with an EGR control valve (52) and an electronic control unit (60). An exhaust gas recirculation pipe (51) extends across the EGR control valve (52). The electronic control unit calculates a target EGR ratio, a target air flow rate, an actual EGR ratio, and an actual air flow rate, on the basis of operational state quantities of an engine. The electronic control unit then calculates, as a target converted EGR ratio, a ratio of the target EGR ratio to the target air flow rate, calculates, as an actual converted EGR ratio, a ratio of the actual EGR ratio to the actual air flow rate, and controls an opening of the EGR control valve such that the target converted EGR ratio becomes equal to the actual converted EGR ratio. An actual converted EGR ratio is proportional to an intake-air oxygen concentration, and an actual converted EGR ratio and a target converted EGR ratio are calculated independently of a command injection amount. Therefore, a desired intake-air oxygen concentration is obtained irrespective of flow rate characteristics of injection valves.

Selected Drawing: Fig. 1

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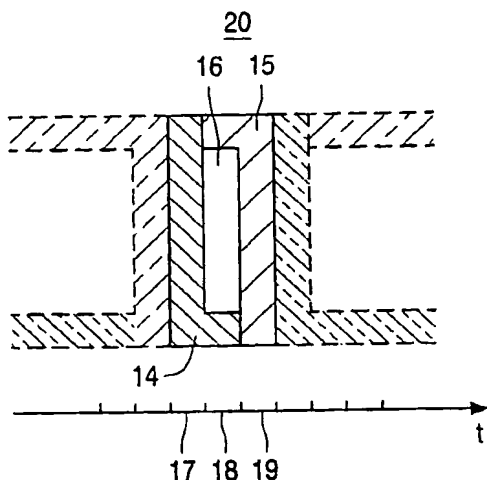
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- (71) Applicant (*for all designated States except US*): **KONINKLIJKE PHILIPS ELECTRONICS N.V.** [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventor; and
(75) Inventor/Applicant (*for US only*): **VAN BEEK, Johannes, C., M.** [NL/NL]; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: **METHOD AND DEVICE FOR DISPLAYING PROGRAM INFORMATION IN A BANNER**



(57) Abstract: When program information is displayed in a banner on a screen (31), a longitudinal direction of a banner (9, ..., 13, 20, 21, 44, 46) corresponds to time. Ends of a banner (9, ..., 13, 20, 21, 44, 46) correspond to a start time and a finish time. The banner (9, ..., 13, 20, 21, 44, 46) is made up of pixels and is displayed in the form of a 3D banner (20, 21) by starting the banner (20, 21), seen in the longitudinal direction, with a starting area (14) having a predetermined starting dimension and finishing the banner with an end area (15) having a predetermined end dimension. An intermediate area (16) is located between a starting area (14) and an end area (15). The starting (14) and end (15) areas are discernibly different from the intermediate area (16) on the screen (31). In the case of a screen (31) display in which one or more pixels (6) of a first banner (9, ..., 13, 20, 21, 44, 46) coincide with one or more pixels (6) of a second banner (9, ..., 13, 20, 21, 44, 46), either the number of pixels of at least one of the banners (9, ..., 13, 20, 21, 44, 46) is reduced by maximally the number of coinciding pixels (6) or one of the banners (9, ..., 13, 20, 21, 44, 46) is displayed in a non-discernible manner, or not at all.

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